

Regional HIV/AIDS Epidemiologic Profile of Southeast HSR, Massachusetts: 2012

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2011: Southeast HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	2,499	57%
People Reported with HIV or AIDS who are Deceased	1,855	43%
Total Number of People Reported with HIV Infection or AIDS	4,354	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 2. Average annual rate of HIV infection diagnosis from 2008 to 2010 and HIV/AIDS prevalence rate on 12/31/11¹: Southeast HSR, Massachusetts²

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Southeast HSR, MA	7.6	96.0
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate on 12/31/11	Rate per 100,000	Number of people living with HIV/AIDS
Southeast HSR, MA	197.3	2,499
Massachusetts Total	277.5	18,170

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2001–2010, Southeast HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	1,871	69	157
2002	1,962	66	156
2003	2,008	69	115
2004	2,072	49	112
2005	2,129	52	107
2006	2,202	44	114
2007	2,270	40	108
2008	2,312	49	91
2009	2,376	44	108
2010	2,423	42	89

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 4. People diagnosed with HIV infection from 2008–2010¹ and people living with HIV/AIDS on December 31, 2011 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Southeast HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	209	73%	1,770	71%
Female	79	27%	729	29%
Place of Birth:	N	%	N	%
US	198	69%	1,899	76%
Puerto Rico/US Dependency ³	12	4%	149	6%
Non-US	78	27%	451	18%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	160	56%	1,545	62%
Black (non-Hispanic)	85	30%	551	22%
Hispanic/Latino	42	15%	369	15%
Asian/Pacific Islander	-- ⁷	-- ⁷	16	1%
Other/Undetermined ⁴	-- ⁷	-- ⁷	18	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	122	42%	974	39%
Injection Drug Use (IDU)	23	8%	542	22%
MSM/IDU	9	3%	80	3%
Heterosexual Sex	44	15%	377	15%
Other	0	0%	56	2%
Total Undetermined	90	31%	470	19%
• Presumed Heterosexual Sex ⁴	29	10%	164	7%
• Undetermined ⁵	61	21%	306	12%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2011	
Under 13	0	0%	4	<1%
13 to 19	8	3%	13	1%
20 to 24	21	7%	36	1%
25 to 29	18	6%	56	2%
30 to 34	30	10%	114	5%
35 to 39	30	10%	161	6%
40 to 44	51	18%	306	12%
45 to 49	53	18%	507	20%
50 to 54	37	13%	560	22%
55 to 59	25	9%	396	16%
60+	15	5%	346	14%
Total⁶	288	100%	2,499	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Southeast HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,211	68%	334	46%
Black (non-Hispanic)	299	17%	252	35%
Hispanic/Latino	239	14%	130	18%
Asian/Pacific Islander	12	1%	-- ³	-- ³
Other/Undetermined ²	9	1%	-- ³	-- ³
Total	1,770	100%	729	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 6. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Southeast HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	974	55%	N/A	N/A
Injection drug use (IDU)	324	18%	218	30%
MSM/IDU	80	5%	N/A	N/A
Heterosexual sex	106	6%	271	37%
Other	34	2%	22	3%
Total Undetermined	252	14%	218	30%
• Presumed heterosexual sex ²	N/A	N/A	164	22%
• Undetermined ³	252	14%	54	7%
Total	1,770	100%	729	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Southeast HSR, Massachusetts¹, 2001–2010²

	Male		Female		Total
	N	%	N	%	
2001	103	66%	54	34%	157
2002	111	71%	45	29%	156
2003	80	70%	35	30%	115
2004	85	76%	27	24%	112
2005	87	81%	20	19%	107
2006	81	71%	33	29%	114
2007	85	79%	23	21%	108
2008	67	74%	24	26%	91
2009	76	70%	32	30%	108
2010	66	74%	23	26%	89

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Southeast HSR, Massachusetts¹, 2001–2010²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2001	97	62%	40	25%	19	12%	157
2002	88	56%	31	20%	33	21%	156
2003	76	66%	28	24%	9	8%	115
2004	60	54%	24	21%	25	22%	112
2005	65	61%	29	27%	12	11%	107
2006	65	57%	29	25%	15	13%	114
2007	58	54%	25	23%	23	21%	108
2008	50	55%	30	33%	11	12%	91
2009	57	53%	30	28%	20	19%	108
2010	53	60%	25	28%	11	12%	89

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Southeast HSR, Massachusetts¹, 2001–2010²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2001	114	73%	6	4%	37	24%	157
2002	107	69%	19	12%	30	19%	156
2003	85	74%	6	5%	24	21%	115
2004	76	68%	9	8%	27	24%	112
2005	80	75%	6	6%	21	20%	107
2006	80	70%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	114
2007	69	64%	7	6%	32	30%	108
2008	61	67%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	91
2009	72	67%	5	5%	31	29%	108
2010	65	73%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	89

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Southeast HSR, Massachusetts¹, 2001–2010²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	44	28%	34	22%	7	4%	23	15%	5	3%	14	9%	30	19%	157
2002	56	36%	37	24%	-- ⁵	-- ⁵	23	15%	-- ⁵	-- ⁵	11	7%	23	15%	156
2003	43	37%	19	17%	-- ⁵	-- ⁵	16	14%	-- ⁵	-- ⁵	14	12%	18	16%	115
2004	47	42%	12	11%	-- ⁵	-- ⁵	13	12%	-- ⁵	-- ⁵	11	10%	25	22%	112
2005	50	47%	14	13%	-- ⁵	-- ⁵	12	11%	-- ⁵	-- ⁵	5	5%	21	20%	107
2006	57	50%	12	11%	-- ⁵	-- ⁵	9	8%	-- ⁵	-- ⁵	14	12%	21	18%	114
2007	48	44%	14	13%	-- ⁵	-- ⁵	13	12%	-- ⁵	-- ⁵	8	7%	22	20%	108
2008	37	41%	7	8%	6	7%	15	16%	0	0%	8	9%	18	20%	91
2009	45	42%	7	6%	-- ⁵	-- ⁵	18	17%	-- ⁵	-- ⁵	12	11%	25	23%	108
2010	40	45%	9	10%	-- ⁵	-- ⁵	11	12%	-- ⁵	-- ⁵	9	10%	18	20%	89

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Southeast HSR, Massachusetts¹, 2001–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2001	72	157	46%
2002	68	156	44%
2003	43	115	37%
2004	47	112	42%
2005	38	107	36%
2006	46	114	40%
2007	39	108	36%
2008	36	91	40%
2009	40	108	37%
2010	27	89	30%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Southeast HSR, Massachusetts,¹ 2008–2010²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	73	209	35%
Female	30	79	38%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	55	160	34%
Black (non-Hispanic)	31	85	36%
Hispanic/Latino	16	42	38%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	33	78	42%
Total	103	288	36%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12